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(54) **PATIENT INTERFACE FOR
OPHTHALMOLOGIC DIAGNOSTIC AND
INTERVENTIONAL PROCEDURES**

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This patent is subject to a terminal dis-
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(57) **ABSTRACT**

A patient interface assembly for interfacing an ophthalmic intervention system with an eye of a patient includes a housing, an optical lens coupled to the housing, an eye engagement assembly coupled to the housing, the eye engagement assembly including an inner seal and an outer seal, and a tissue migration bolster structure positioned between the inner seal and outer seal and configured to apply a resisting load against portions of the eye in a vacuum zone which are capable of distending upon application of the vacuum load. The eye engagement assembly is adapted to be placed into contact with the eye of the patient by sealably engaging the eye with the inner and outer seals, thereby defining the vacuum zone as being between the inner and outer seals when placed into contact with the eye.

16 Claims, 38 Drawing Sheets

